

AOS

Tom

8/1/79

10/21/79

Dear Mr. Fabris,

My name is David Clark and I have recently sent you some information on a video program and some information on percent.

In this letter I'm sending you some information on the % between % (20050) to % (20070), and some more information on % (20462). I have also developed a program that computes square root and a program listing for a new video program.

% (20054), and % (20056) change the musical note for the next character placed on the screen

% (20051) = is similar to a temporary NT so the larger number less than 256 will present a buzzing noise as long as it would on the normal NT. Its normal values are 0 to 3. So if you set % (20051) to 0 it will stay the same as pushing play go.

POKE#

20070 = %  
push key to  
see new  
character

$\% (20056) =$  is similar to mu on the music registers (I.E. the 8's), By changing  $\% (20056)$  to different numbers and pressing "go" key the cursor will change its regular note to on off version of its sound. By setting  $\% (20056)$  to 71 and pressing the "go" key the cursor will play its regular note.

$\% (20066) =$  strange line numbers after setting this to a certain value and pressing the "go" key, it will place a line no. after the cursor.

$\% (20070) =$  changes the value of the form of printing of numbers. 160 = normal

$\% (20076) =$  same as  $\% (20070)$ . 8 = normal

Here are some examples that you can assign to these  $\% 's$

percent no		2 values
% (20054)	=	3, 255
% (20056)	=	8, 171
% (20066)	=	5, 159
% (20070)	=	160, 1164
% (20076)	=	8, 100

I thought percent (20070) and percent (20076) were pretty neat, and they could also be used for your own type of code.

Here is a program that you can type in to compare the no. 1 in its different forms and the values % (20070) are set to.

TYPE IN

```
10 FOR A = 0 TO 255
20 % (20070) = 160 ; PRINT #1, A,
30 % (20076) = A PRINT #1, 1,
40 NEXT A
```

Here is a program that works the same as above but for % (20076)

```
10 FOR A = 0 TO 255
20 % (20076) = 8 ; PRINT #1, A,
30 % (20070) = A ; PRINT #1, 1,
40 NEXT A
```

wood  
x 100 - 178  
std chart  
↓ wood

std chart  
↓ wood

Here is another percent you can try:

$$90(20460) = 32$$

should print "SORRY"

$$90(20460) = -369$$

should leave a space before the even

This program will draw an outlined circle instead of a boxed circle on the screen like the last program I sent you did:

```
10 INPUT X,Y
20 CLEAR
30 BOX X,Y,1,1,1
40 A=X+Y÷2; B=Y-A÷2
50 IF PX(A,B)=1 GOTO 10
60 X=A; Y=B; GOTO 30
```

By changing the value of the numbers after the divide signs you can make the circle at different angles

EX. 40 A=X+Y÷2; B=Y-A÷10 → this will draw a football shaped object on the screen.

For the last program in my letter I am including a very basic square root formula that is very small in size but partially long in time running.

```
10 INPUT S
20 FOR A=0 TO 181
30 IF A*A > S_ A=A-1; GOTO 50
40 NEXT A
50 PRINT #1, S, "SQUARE ROOT=", #1, A
60 GOTO 10
```

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Well, I hoped you liked the information that I have sent you, and that you might find it useful for your paper.

Sincerely,

David Clark

P.S: Here are some questions that I have and wondered if you might be able to answer them.

1. Any tips on how to bypass the  
if modulator?
2. More information on the three custom  
chips?
3. More detailed explanation of the  
XY character?
4. Controlling outputs through the I/O  
ports to control external devices?
5. Tom Moore home address, or Dear  
ask him how in the world he knew  
all those strange numbers and where he  
got his look that converted his statements  
to object codes that is on page 25 of  
your paper?
6. With all the music registers and notations  
here on, when is somebody going to come  
up with a simple speech processor program?

PS: PS: If you remember before I sent  
you some information on  $\phi(14)$  and  $\phi(15)$  and  
how you can watch them change with the  
different change in voice tone, well you can  
also plug in the plug that connects to the  
tape recorder to a standard 8 ohm radio

earphone connector, and type in the same program as before, you can see that the numbers will change with the different inputs from the radio earphone.

Oh yes, I have also included a check from my father for \$10.00 for another year's subscription to your paper.